CHAPTER 90: CRITICAL AREAS UPDATE JANUARY 28, 2016

PLANNING COMMISSION AND HOUGHTON COMMUNITY COUNCIL JOINT MEETING

INTRODUCTION

- Growth Management Act (GMA) require Best Available Science (BAS) to protect critical areas:
  - **Wetlands:** Department of Ecology guidance on BAS, including rating system and buffers
  - **Streams:** BAS on buffers and WAC 222-16-030 for stream classification system
  - **Endangered, threatened or sensitive species**: GMA requires protection of habitat
  - **Priority Habitats and Species**: GMA optional consideration of protection for local sensitive species
  - **Frequently flooded areas**: Generally GMA consistent but some minor amendments will be made
  - **Geologically Hazardous Areas**: Meet GMA but will update mapping and then review regulations after Chapter 90
- If Kirkland does not use accepted BAS guidance, must do scientific study to defend alterative approach

REVIEW PROCESS

- Review **Technical Reports** (The Watershed Company)
  - Best Available Science Report
  - Gap Analysis
- Discuss key **policy issues** for direction on code amendments
- Review **draft** code amendments
- Hold **hearing** and **make recommendation** to City Council

- **Public Outreach**: notice, web site, listserv, briefing before KAN, open houses, study sessions and hearing

COMPLIANT UNDER GMA

- Review City amendments for consistency with GMA
  - Department of Commerce – lead GMA review agency
  - Department of Ecology
  - Department of Fish and Wildlife
  - Puget Sound Regional Council
- Muckleshoot Tribe can comment

- Amendments can be challenged before the state Growth Management Hearings Board

EXISTING STRUCTURES AND IMPROVEMENTS

- Existing structures and improvements will not be affected by the new regulations. They are "grandfathered" in.

- New structures, including decks, patios and sheds, enlargements of existing structures or new landscaping with non-native vegetation would be restricted if located in a buffer

- City does have some discretion on new provisions for non-conformances

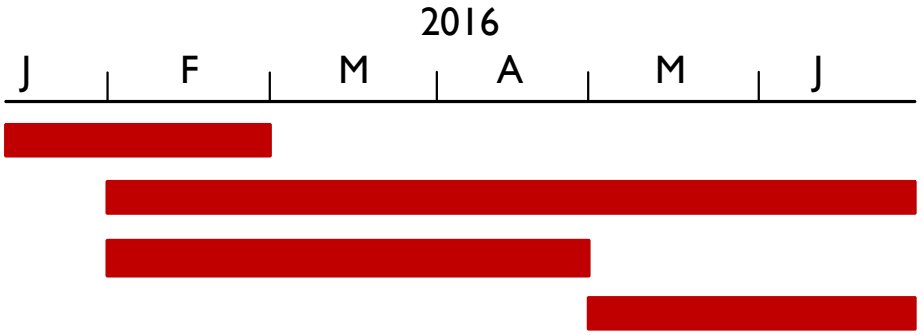
BACKGROUND

- Most of the current **CAO dates back to 1992**. The City did not revise the CAO during the last GMA update.
- The City's **SMP was adopted in 2010** and did include updated regulations for critical areas within shoreline jurisdiction.
- To meet protection standards documented in the best available science, both wetland and stream **buffers will need to be increased**.
- This update will bring **consistency with GMA throughout the City**, not just shoreline areas.

TIMELINE

- Work Completed To-Date (2015)
  - Technical Reports
    - BAS Review
    - Gap Analysis
  - Review of Mitigation Effectiveness in Kirkland

- To Be Completed (2016)
  - Draft regulatory revisions — Jan – April 2016
  - Public Involvement (open houses) — Feb – July 2016
  - Planning Commission Review — Feb – May 2016
  - City Council Review — June – July 2016



CRITICAL AREAS

Addressed in BAS/Gap Analysis

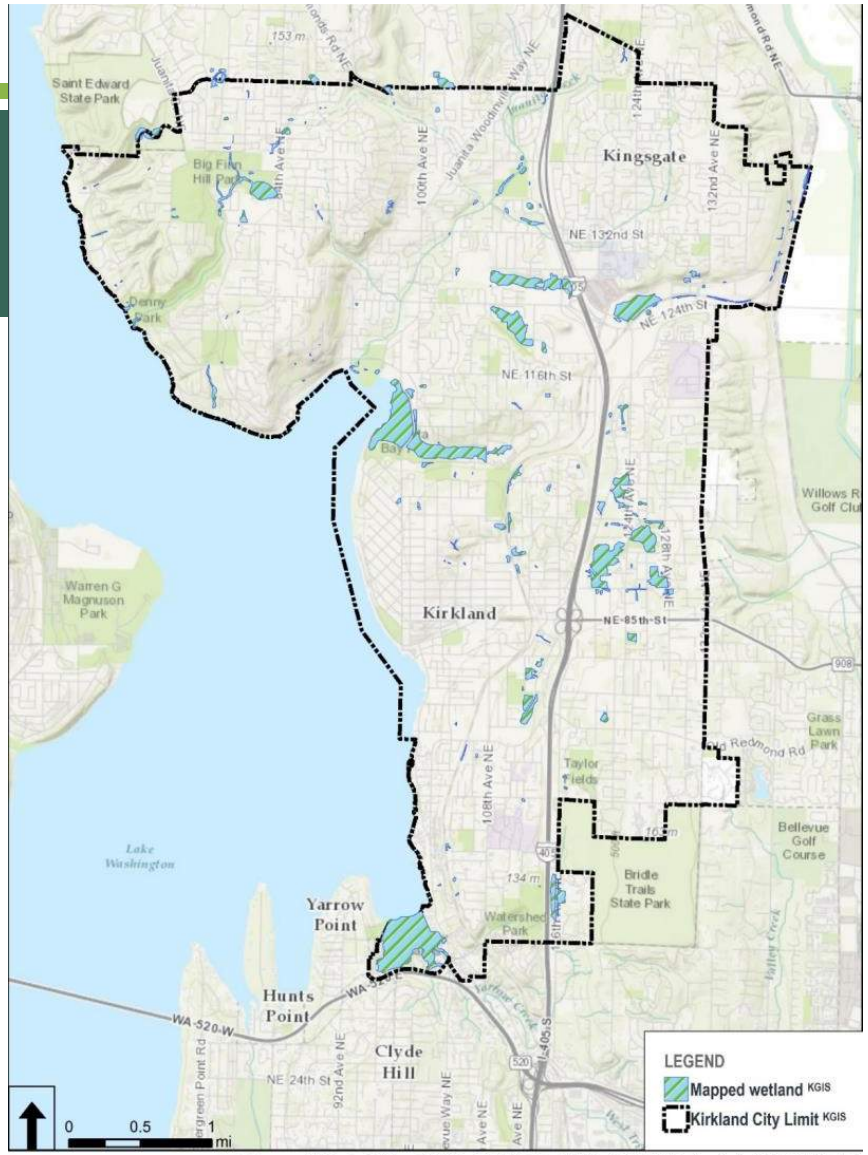
- Wetlands
- Streams
- Wildlife Habitat
- Frequently Flooded Areas

Not Addressed in BAS/Gap Analysis

- KZC, Chapter 85, Geologically Hazardous Areas – separate evaluation
- Critical Aquifer Recharge Areas- none documented in Kirkland

WETLANDS

- Functions of wetlands and buffers
  - Water quality
  - Hydrology
  - Wildlife
- Delineation
- Rating
  - 2014 Ecology Rating



Data Sources: WA Dept of Fish and Wildlife (WDFW), City of Kirkland GIS (KGIS, downloaded 11/30/2015), Esri.
Date: 12/11/2015

WETLANDS

- Buffers

Current wetland buffers in KZC 90

Wetland type	Buffer in primary basin (feet)	Buffer width in secondary basin (feet)
I	100	75
2	75	50
3	50	25

Current wetland buffers in SMP

Wetland Category	Range of Buffer widths based on habitat score (feet)
I: Bogs	215
I: All others	125-215
II	100-200
III	75-125
IV	50

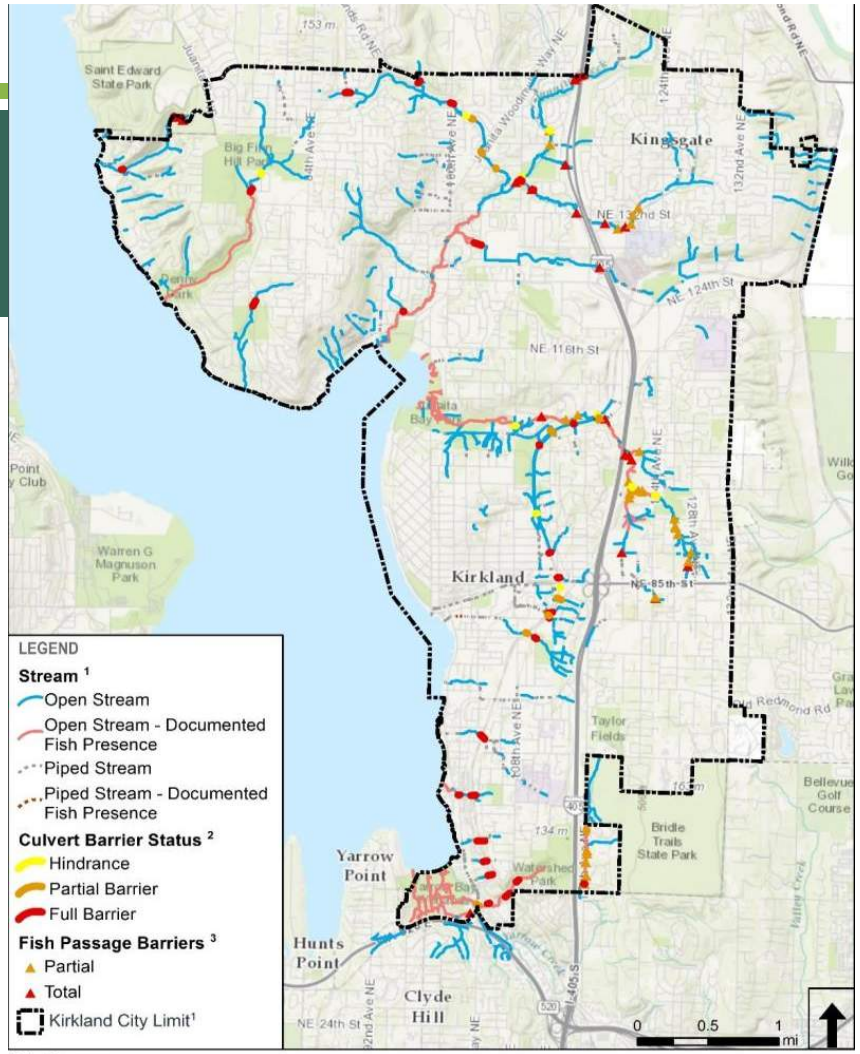
Ecology guidance on wetland buffers

Wetland Category	Range of Buffer widths based on habitat score (feet)
I: Bogs	250-300
I: All others	100-300
II	100-300
III	80-300
IV	55

- Setbacks
  - Recommend: Retain existing 10 ft setback

STREAMS

- Buffer functions
  - Water Quality (nutrients, sediment, pollutants)
  - Temperature
  - Habitat (instream and terrestrial)
- Delineation
- Classification- DNR Stream Typing
  - Type S (Shorelines of the State)- addressed under shoreline buffers in SMP
  - Type F (Fish bearing)
  - Type Np (Non-fish bearing perennial)
  - Type Ns (Non-fish bearing seasonal)



Data Sources:
1. City of Kirkland GIS, downloaded 11/30/2015.
2. The Watershed Company. August 2014. Fish Passage at City of Kirkland Road and Trail Stream Culverts- Preliminary Assessments.
3. Washington Department of Fish and Wildlife. July 2015. Fish Passage Barrier Inventory.
Service layer source: Esri

Date: 12/11/2015

STREAMS

- Buffers

Current stream buffers in KZC 90

Stream Class	Buffer width for streams in primary basin (feet)	Buffer width for streams in secondary basin (feet)
A	75	N/A
B	60	50
C	35	25

Current stream buffers applicable to annexation area in SMP

Stream Type	Buffer width (feet)
F	115
N	65
O (Other)	25

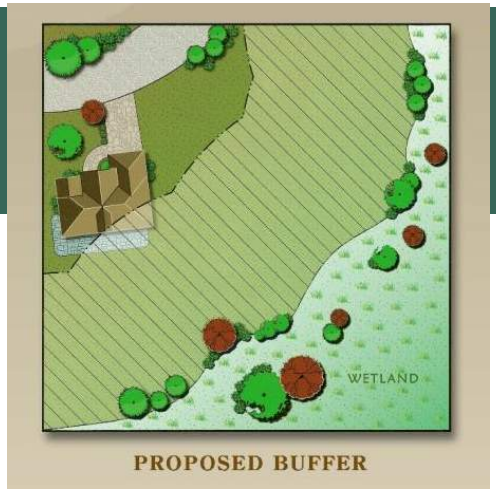
- Setbacks
  - Retain existing 10 ft setback

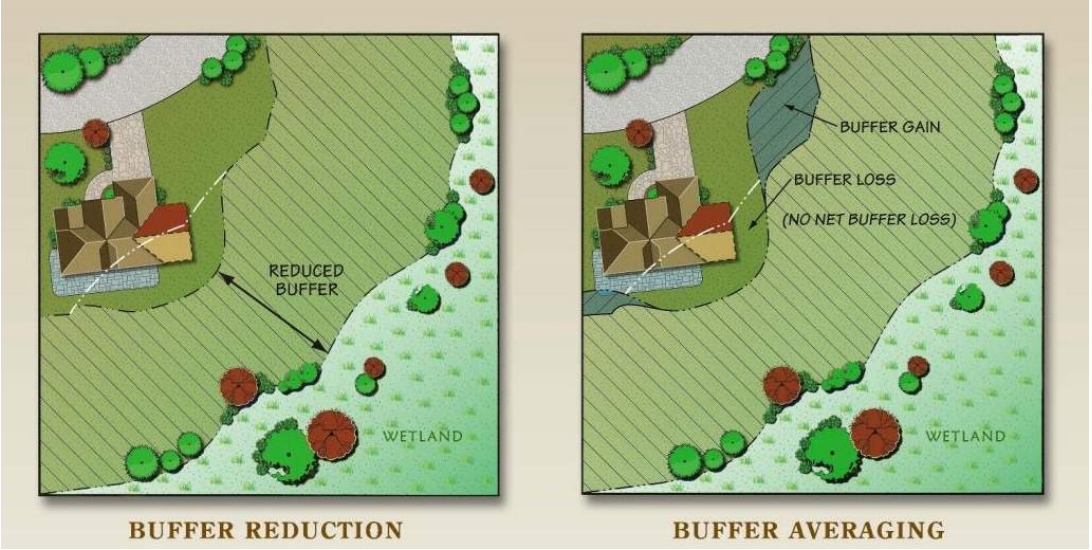
Range of stream buffers consistent with BAS

Stream Type	Sample Buffer Ranges
F	100 - 165 feet
Np	50 - 65 feet
Ns	50 - 65 feet

BUFFER MODIFICATIONS

- Allowed uses
  - Access paths
  - Minor site investigative work
  - Restoration activities
- Buffer averaging and reduction
  - Recommend: Revise from maximum 33% reduction to maximum 25% reduction
- Incentives for restoration
  - Recommend: buffer flexibility with stream daylighting, meandering





MITIGATION

- Mitigation sequencing

- Review of Mitigation in Kirkland
  - Consistent maintenance and monitoring important to success
  - Trend toward increasing success rate
  - Enforcement time consuming for city staff
- Monitoring and maintenance security/enforcement
  - Recommend: Alternative security to assure maintenance

Results of Kirkland Mitigation Review

Percent of sampled projects:	
Released on-schedule (Year 5)	55%
Released in Year-6	10%
Released in Year-7	10%
Outcome unknown	15%
Monitoring in-progress	10%

MITIGATION

Mitigation Alternatives

Permittee-responsible on-site

- Direct replacement of functions
- May not be feasible at constrained sites
- City oversight

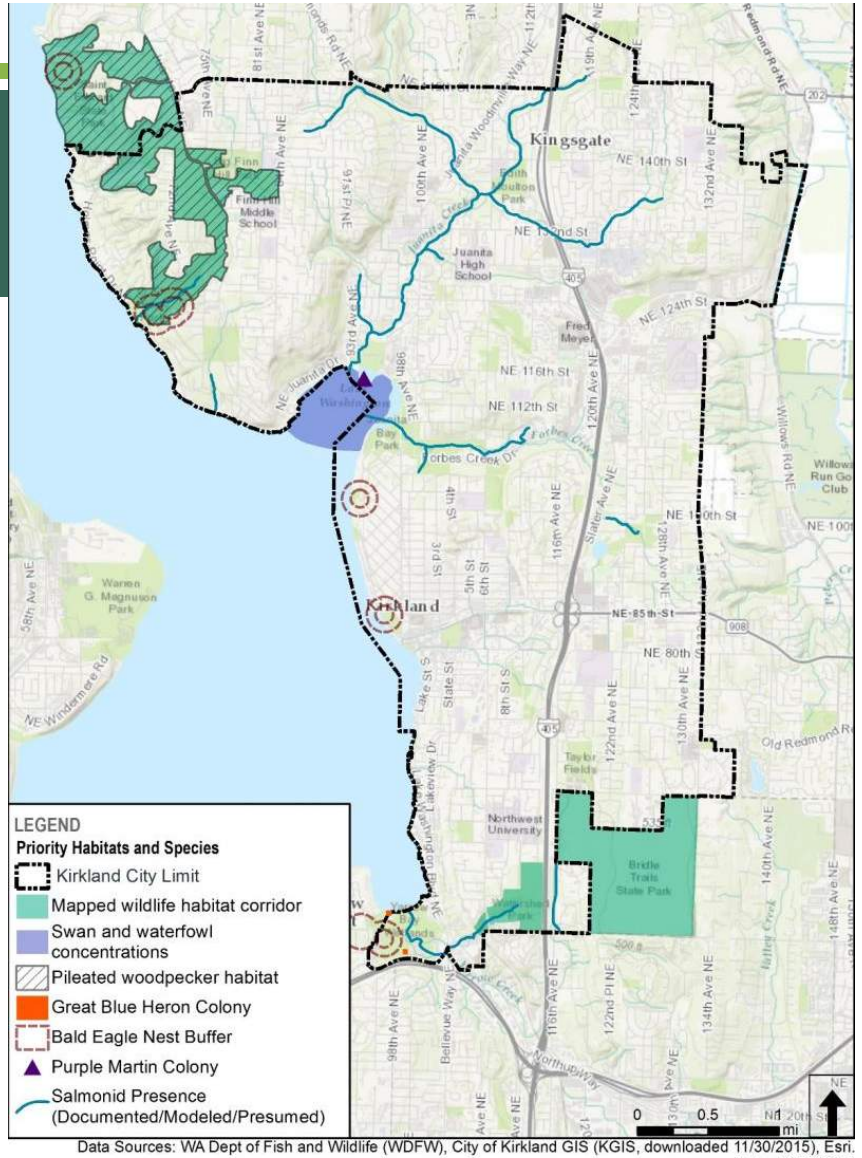
Third-party off-site (mitigation bank or in-lieu fee program)

- Urban → Rural
- Watershed priorities
- More agency oversight
- Higher cost (account for land purchase)

- Reasonable Use Exception
  - Recommend: allowing use of in-lieu fee and mitigation banks

WILDLIFE HABITAT

- Endangered, Threatened, and Sensitive Species (Required)
  - Bald Eagle (Sensitive)- 5 mapped nest sites near Lake Washington
  - Pileated Woodpecker (Sensitive)- Breeding area in O.O. Denny Park, Big Finn Hill Park, St. Edwards State Park, and limited surrounding area
  - Management recommendations from WDFW
- Species and Habitats of Local Importance (City-Determined)
  - Recommend: develop criteria and process for designation in future



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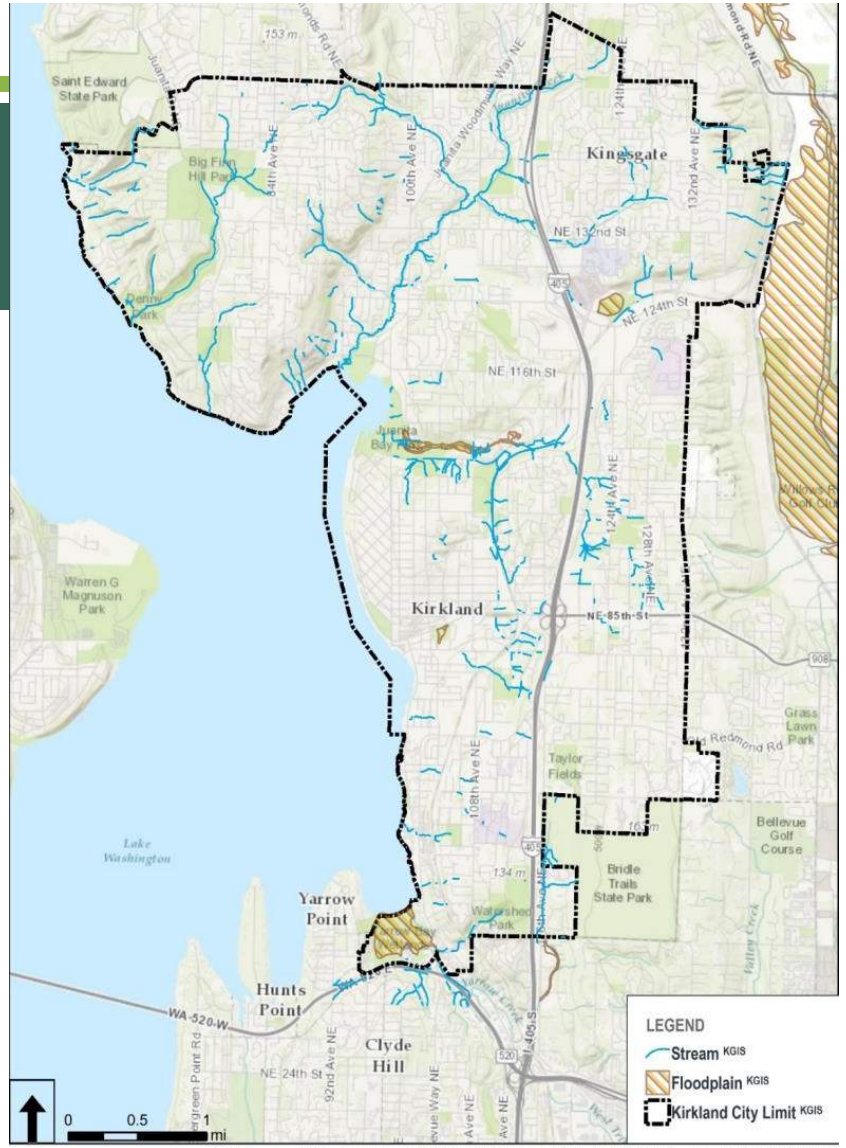
Date: 12/22/2015

FREQUENTLY FLOODED AREAS

- 4 occurrences in Kirkland
- Most in large wetlands on City land (Forbes Creek, Yarrow Creek, Totem Lake) and one in Peter Kirk Ball Fields
- Current code references Flood Damage Prevention
- No significant changes needed



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REGULATORY FLEXIBILITY

- Exceptions
  - Utility and roadway maintenance
  - Maintenance and repair of existing structures
  - Emergency measures
- Modifications to maximum development potential formula
  - Recommend: revise density formula and encourage clustering to maintain current density allowance to account for wider buffers
- Non-conforming uses

NEXT STEPS

- KAN briefing February 10, 2016
- Council briefing February 16, 2016
- Planning Commission study sessions: issues and draft code amendments
  - Feb 25, 2016
  - March 24, 2016
  - April 28, 2016
  - May 26, 2016
  - June joint hearing if completed review draft code amendments
- Houghton Community Council: study sessions: code amendments
  - April 25, 2016 and May 23, 2016